

CLAIMS:

1. A method of recognizing whether a transponder (2) designed for communicating with a communication station (1) belongs to one of at least two groups (GR1, GR2, GR3, GRn) of transponders (2), under which method the communication station (1) designed for communicating with the transponder (2) delivers a request signal (REQS) to the transponder (2), which request signal (REQS) comprises a command data block and a check data block (CRC1, CRC2, CRC3, CRCn), and under which method, data contained in the request signal (REQS) is evaluated in the transponder (2) in order to recognize whether the transponder (2) belongs to a group (GR1, GR2, GR3, GRn) of transponders (2),
5 wherein, for each group (GR1, GR2, GR3, GRn) of transponders (2), a check data block (CRC1, CRC2, CRC3, CRCn) that is significant for the group (GR1, GR2, GR3, GRn) of transponders (2) is generated, and
10 wherein the data that is evaluated for the recognition of whether the transponder (2) belongs to a group (GR1, GR2, GR3, GRn) of transponders (2) is data from the check data block (CRC1, CRC2, CRC3, CRCn) that is significant for the group (GR1, GR2, GR3, GRn) of transponders (2).
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2. A method as claimed in claim 1,
wherein a CRC data block that is significant for the group of transponders (2) is selected as
20 the check data block (CRC1, CRC2, CRC3, CRCn) that is significant for the group (GR1, GR2, GR3, GRn) of transponders (2).
3. A communication station (1) for communicating with a transponder (2), which transponder (2) belongs to one of at least two groups (GR1, GR2, GR3, GRn) of
25 transponders (2),
wherein the communication station (1) contains means (8, 10, 11, 12, 13) for implementing the method as claimed in any one of claims 1 and 2.
4. A communication station (1) as claimed in claim 3,

wherein check-data-block generation means (12) is provided and
wherein the check-data-block generation means (12) takes the form of CRC-data-block
generation means (12), which CRC-data-block generation means (12) interacts with start-
value memory means (13), which is provided to store a start value (SV1, SV2, SV3,
5 SVn), which start value (SV1, SV2, SV3, SVn) is provided in order to influence the
generation of the CRC data block (CRC1, CRC2, CRC3, CRCn) in the CRC-data-block
generation means (12), and
wherein the start-value memory means (13) is of programmable design and is designed for
storing different start values (SV1, SV2, SV3, SVn), which different start values (SV1,
10 SV2, SV3, SVn) can be written to the start-value memory means (13) and are
responsible for the generation of different CRC data blocks (CRC1, CRC2, CRC3,
CRCn), of which different CRC data blocks (CRC1, CRC2, CRC3, CRCn), each CRC
data block (CRC1, CRC2, CRC3, CRCn) is significant for a group (GR1, GR2, GR3,
..... GRn) of transponders (2).

15 5. A circuit (3) for a communication station (1) for communicating with a
transponder (2), which transponder (2) belongs to one of at least two groups (GR1, GR2,
GR3, GRn) of transponders (2),
wherein the circuit (3) contains means (8, 10, 11, 12, 13) for implementing the method as
20 claimed in any one of claims 1 and 2.

6. A circuit (3) as claimed in claim 5,
wherein check-data-block generation means (12) is provided and
wherein the check-data-block generation means (12) takes the form of CRC-data-block
25 generation means (12), which CRC-data-block generation means (12) interacts with start-
value memory means (13), which is provided to store a start value (SV1, SV2, SV3,
SVn), which start value (SV1, SV2, SV3, SVn) is provided in order to influence the
generation of the CRC data block (CRC1, CRC2, CRC3, CRCn) in the CRC-data-block
generation means (12), and
30 wherein the start-value memory means (13) is of programmable design and is designed for
storing different start values (SV1, SV2, SV3, SVn), which different start values (SV1,
SV2, SV3, SVn) can be written to the start-value memory means (13) and are
responsible for the generation of different CRC data blocks (CRC1, CRC2, CRC3,
CRCn), of which different CRC data blocks (CRC1, CRC2, CRC3, CRCn), each CRC

data block (CRC1, CRC2, CRC3, CRCn) is significant for a group (GR1, GR2, GR3, GRn) of transponders (2).

7. A transponder (2) for communicating with a communication station (1), which
5 transponder (2) belongs to one of at least two groups (GR1, GR2, GR3, GRn) of
transponders (2),

wherein the transponder (2) contains means (44, 45, 46, 47, 48, 49) for implementing the
method as claimed in any one of claims 1 and 2.

10 8. A transponder (2) as claimed in claim 7,

wherein check-data-block generation means (47) is provided and
wherein the check-data-block generation means (47) takes the form of CRC-data-block
generation means (47), which CRC-data-block generation means (47) interacts with start-
value memory means (40), which is provided to store a start value (SV1, SV2, SV3,
15 SVn), which start value (SV1, SV2, SV3, SVn) is provided in order to influence the
generation of the CRC data block (CRC1, CRC2, CRC3, CRCn) in the CRC-data-block
generation means (47), and

wherein the start-value memory means (40) is of programmable design and is designed for
storing different start values (SV1, SV2, SV3, SVn), which different start values (SV1,
20 SV2, SV3, SVn) can be written to the start-value memory means (40) and are
responsible for the generation of different CRC data blocks (CRC1, CRC2, CRC3,
CRCn), of which different CRC data blocks (CRC1, CRC2, CRC3, CRCn), each CRC
data block (CRC1, CRC2, CRC3, CRCn) is significant for a group (GR1, GR2, GR3,
..... GRn) of transponders (2).

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9. A transponder (2) as claimed in claim 8,

wherein the start-value memory means (40) is designed to store at least two different start
values (SV1, SV2, SV3, SVn), and

wherein means (39, 49) for sending one start value (SV1, SV2, SV3, SVn) selected
from the at least two start values (SV1, SV2, SV3, SVn) to the CRC-data-block
30 generation means (47) are provided.

10. A circuit (4) for a transponder (2) for communicating with a communication station (1), which transponder (2) belongs to one of at least two groups (GR1, GR2, GR3, GRn) of transponders (2),
wherein the circuit (4) contains means (44, 45, 46, 47, 48, 49) for implementing the method
5 as claimed in any one of claims 1 and 2.

11. A circuit (4) as claimed in claim 10,
wherein check-data-block generation means (47) is provided and
wherein the check-data-block generation means (47) takes the form of CRC-data-block
10 generation means (47), which CRC-data-block generation means (47) interacts with start-
value memory means (40), which is provided to store a start value (SV1, SV2, SV3,
SVn), which start value (SV1, SV2, SV3, SVn) is provided in order to influence the
generation of the CRC data block (CRC1, CRC2, CRC3, CRCn) in the CRC-data-block
generation means (47), and
15 wherein the start-value memory means (40) is of programmable design and is designed for
storing different start values (SV1, SV2, SV3, SVn), which different start values (SV1,
SV2, SV3, SVn) can be written to the start-value memory means (40) and are
responsible for the generation of different CRC data blocks (CRC1, CRC2, CRC3,
CRCn), of which different CRC data blocks (CRC1, CRC2, CRC3, CRCn), each CRC
20 data block (CRC1, CRC2, CRC3, CRCn) is significant for a group (GR1, GR2, GR3,
..... GRn) of transponders (2).

12. A circuit as claimed in claim 11,
wherein the start-value memory means (40) is designed to store at least two different start
25 values (SV1, SV2, SV3, SVn), and
wherein means (39, 49) for sending one start value (SV1, SV2, SV3, SVn) selected
from the at least two start values (SV1, SV2, SV3, SVn) to the CRC-data-block
generation means (47) are provided.